

ABSTRACT

ELECTRONIC CONVERTER FOR CONVERTING AN ACOUSTIC SIGNAL INTO A
PSEUDO-DIGITAL SIGNAL, TIMEPIECE INCLUDING SUCH A CONVERTER AND
TWO-DIRECTIONAL COMMUNICATION METHOD VIA ACOUSTIC WAVES

The present invention concerns the use of a sound generator circuit (22) including a piezoelectric vibrator (P_3) as an acoustic wave receiver.

5 The invention also concerns an electronic converter (20) including a sound generator circuit (22) provided with a piezoelectric vibrator (P_3) as well as means supplying a reference voltage, characterised in that it further includes comparison means which compare the reference voltage to the voltage generated by the piezoelectric vibrator (P_3) when the latter picks up an acoustic wave, said comparison means generating a pseudo-digital signal when the voltage generated by said vibrator (P_3) exceeds said reference voltage.

10 Finally the invention concerns a timepiece provided with a converter circuit (20) as described above, as well as a two-directional communication method via acoustic waves between an emitter unit and a receiver unit.

Figure 7